CLAIM

1. A method for suppressing fuel evaporation in a fuel storage device having a tank for storing fuel, comprising the steps of:

suppressing temperature rise of stored fuel by absorbing heat from the stored fuel into heat storage material when the fuel temperature increases into a high temperature range where saturated vapor pressure of the fuel varies in a relatively large magnitude according to change of fuel temperature; and

radiating the heat absorbed into the heat storage material from the heat storage material to the stored fuel when the fuel temperature decreases into a low temperature range where the saturated vapor pressure of the fuel varies in a relatively small magnitude according to change of fuel temperature;

whereby effect of suppression of decrease in the saturated vapor pressure is small when the heat storage material radiates heat to the stored fuel; and

the effect of suppression of increase in the saturated vapor pressure, when the heat storage material absorbs heat from the stored fuel, is larger than the effect of suppression of the decrease in the saturated vapor pressure, so that evaporation of fuel is suppressed in total.

2. A fuel storage device having a tank for storing fuel, comprising heat storage means having heat storage material and for exchanging heat with stored fuel stored in the tank.

3. A fuel storage device according to claim 2, wherein the heat storage means are disposed on an inner surface of the tank or on surfaces of members immersed in the stored fuel.

4. A fuel storage device according to claim 2, wherein the heat storage means comprise buoyancy generating means for generating buoyancy in the stored fuel.

5. A fuel storage device according to claim 4, wherein the heat storage means have containers each of which has the heat storage material sealed therein and in each of which an empty portion having no heat storage material is provided as the buoyancy generating means.

6. A fuel storage device according to claim 5, wherein the containers have diameters larger than a diameter of an inlet port of a fuel pump sucking the stored fuel from the tank.

7. A fuel storage device according to claims 2:

wherein the heat storage means have containers each of which has the heat storage material sealed therein; and

wherein the heat storage material is formed of a substance having a melting point at ordinary temperature and storing heat as latent heat.

8. A fuel storage device according to claim 7, wherein the heat storage material contains any one of calcium chloride 6-salt, octadecane, and cyclohexanol.